

# MPA Management Capacity Building Training



## Module 2:

# MPA NETWORKS



# Overview of Presentation

## **PART 2.1:**

- **INTRODUCTION TO MAP NETWORKS**

**Advantages of MPA Networks**

## **PART 2.2:**

- **TYPES OF MPA NETWORKS**

**Social, Ecological and Management Networks**

## **PART 2.3:**

- **FROM SINGLE MPAs TO NETWORKS**

**Criteria for Selection of MPAs**

# Overview of Presentation

## **PART 2.4:**

- **CONNECTIVITY IN MPA NETWORK DESIGN**

**Role of Connectivity in Network Design**

## **PART 2.5:**

- **DEVELOPING NETWORKS**

**Lessons Learned for Developing Networks**

## **PART 2.6:**

- **DEVELOPING A NETWORK OF MPAs**

# What are Today's Objectives?

- **Learn about the ecological, social and management benefits of different types of MPA networks**
- **Study the practicalities of scaling up from individual MPAs to networks of MPAs**
- **Learn how to design MPA networks, including the pitfalls and advantages**

# Introduction to MPA Networks

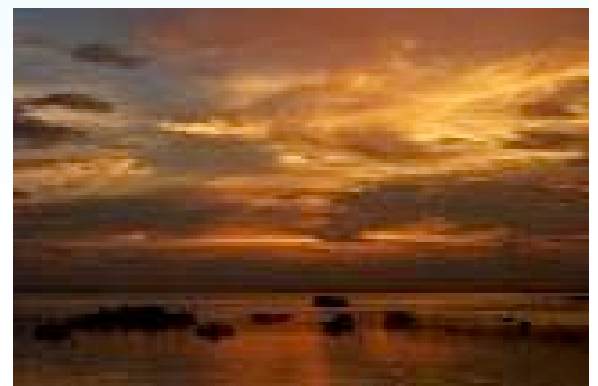
**An MPA network is a system of individual marine protected areas defined by connectivity and operating at various spatial scales, with a range of protection levels, that fulfill biodiversity goals and objectives more effectively than individual sites could alone.**



# Introduction to MPA Networks

## Different kinds of MPA networks include:

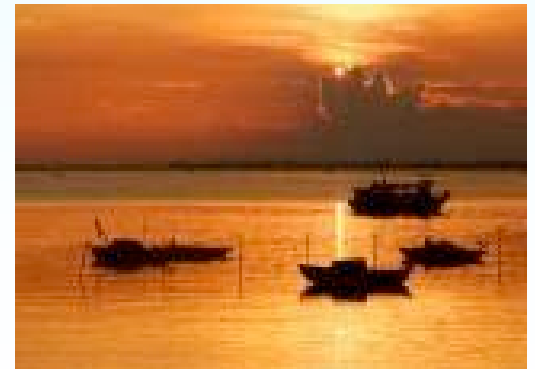
- **Social/Administrative Networks**
- **Biophysical and Ecological Networks**
- **Management-based Networks**



# Introduction to MPA Networks

## **SOCIAL/ADMINISTRATIVE NETWORKS:**

- **Based on social/cultural connectivity**
- **Opens channels of communication to share experiences and lessons learned**
- **Build consensus across sites for decision making**
- **Institutionalizes administrative and financial mechanisms**



# Introduction to MPA Networks

## ECOLOGICAL NETWORKS:

- Ensures most valuable and representative habitats receive protection
- Provides continuous corridors for wide-ranging and migratory species
- Upstream/downstream impacts are managed
- Ensures habitat/spatial range of threatened or vulnerable species are protected





# Introduction to MPA Networks

## MANAGEMENT-BASED NETWORKS:

- Increased efficiency, consistency and coordination to improve management effectiveness
- Incorporates concepts of social and ecological networks
- Consistency in program development
- Consistency in regulatory development
- Common approaches to addressing priority resource management issues



# From Single MPAs to Networks

## CRITERIA FOR SELECTION OF MPAs:

- **Habitat quality:** at least better than average
- **Fish habitat:** abundance/diversity of fish or spawning aggregations
- **Oceanographic features:** aggregate or dispersal of larvae, periodic flushing
- **Biodiversity:** higher than average
- **Size:** covers important part of life history of priority species
- **Social acceptance:** do not create unnecessary social conflicts

# From Single MPAs to Networks

## CRITERIA FOR SELECTION OF MPAs:

- **Practicality of management:** effectively established and enforced areas of zones
- **Practicality of management:** areas where management programs and legal frameworks can be effectively implemented and sustained

*WHAT ELSE?*



# From Single MPAs to Networks

## **CRITERIA FOR SELECTION OF NETWORKS:**

- **Meet minimum requirements for MPAs**
- **Evaluate individual sites for their contribution to network as a whole**
- **Planning should take place on area-wide basis**
- **Management capacity should be met at individual site level, then linked to network**
- **Planning should start from bottom-up and top down and include all sectors**
- **Planning within ICM framework and inclusive of all legal authorities**

# From Single MPAs to Networks

## **CRITERIA FOR SELECTION OF NETWORKS:**

- **Networks should cover a critical minimum area of the larger ICM planning area**
- **Management should be both vertical and horizontal**
- **Networks need to consider both environmental and social aspects**

***WHAT ELSE?***



# Connectivity in MPA Network Design

## **BIOPHYSICAL CONNECTIVITY AND NETWORKS:**

- **Geomorphology (structure)**
- **Bathymetry (features)**
- **Current circulation**
- **Transition zones of major biogeographic regions (critical nesting, nursery and feeding grounds)**
- **Linkages between ecosystems (corridors)**

# Connectivity in MPA Network Design

## **SOCIAL/CULTURAL/POLITICAL CONNECTIVITY AND NETWORKS:**

- **Values and perceptions about natural resources**
- **Traditional systems of management of natural resources**
- **Social structure at community level**
- **Political structure at community, regional, and national levels**
- **Role of marine resources in traditions and customs**

# Developing Networks

## **STEPS FOR NETWORK DEVELOPMENT:**

- 1. Ensure management capacity secured for individual sites**
- 2. Identify areas of connectivity**
- 3. Identify partners already working in the area**
- 4. Develop horizontal & vertical working group**
- 5. Identify priority resource management issues**
- 6. Identify jurisdictional authorities**
- 7. Identify common goals and objectives for network**



# Developing Networks

## STEPS FOR NETWORK DEVELOPMENT:

8. **Identify cross-cutting management strategies**
9. **Design performance measures**
10. **Design implementation plan**

